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City of Ione

23 July 2007

Scott Kranhold
CVRWQCB
11020 Sun Center Drive #200
Rancho Cordova, CA 95670-6114

Dear Sir:

Re: Order R5-2003-0108 (9) Quarterly Compliance Status Report

Second Quarter 2007 Ione WWTP Compliance Status Report

Pursuant to Order R5-2003-0108 (9), Quarterly Compliance Status Report, Ione is required to, "...describe all work completed during the calendar quarter to comply with this Cease and Desist Order; all operation and maintenance work completed on the wastewater treatment facility; and any new, modified, or renovated component of the treatment and disposal system."

In compliance with the foregoing language we submit the following information:

- ***Describe all work completed during the calendar quarter to comply with this Cease and Desist Order***
- 1. Order R5-2003-0108 (1) states, "The Discharger shall **forthwith** come into compliance with Discharge Prohibition A.1 and the Groundwater Limitation of WDRs No. 95-125. "Forthwith" means as soon as reasonably possible. In no event shall compliance be delayed beyond **30 December 2005.**"

During second quarter 2007 we performed periodic inspections of the southerly bank of Sutter Creek and did not observe any evidence of seepage.

During second quarter 2007 we performed groundwater monitoring as prescribed by the Order 95-125 revised Monitoring and Reporting Program. Although not required, we have continued surface water monitoring. Evaluation of data collected to date indicates that the City wastewater facilities may be causing some degradation with regards to salinity, boron, and manganese levels. The degradation from salinity and boron does not result in violations of water quality objectives. Manganese concentrations cause an exceedance of water quality objectives. However, recently-collected data suggests that this may be a very localized phenomenon.

*In any case, the cause of the manganese problem is not wastewater manganese concentrations (pond manganese concentrations were measured at 0.08 mg/L in 2003, 0.13 mg/L in 2004, 0.08 mg/L in 2005, and 0.084 mg/L in 2006). A possible cause of this problem is organic load under the treatment ponds causing a reducing environment that can mobilize/solubilize naturally occurring soil manganese that would otherwise remain bound to the soil. Another possible cause could be natural subsurface pockets of anaerobically decaying vegetation causing a reducing environment. A third potential source of elevated manganese in the groundwater could be from geological deposits of coal-bearing minerals such as lignite. Per the 30 March 1990 publication by James L. Lessman, Consulting Geologist, **REPORT ON THE GEOLOGY AND MINERAL RESOURCE POTENTIAL OF PARCELS D AND F IONE AREA**, Figure (9), COAL BASINS-IONE AREA, shows that the WWTP site lies completely within the "Ione Coal Basin." Consequently, the potential for elevated Manganese levels in the groundwater may exist entirely independent of the WWTP operations. Amador County Environmental Health Department has provided the City with reports that show manganese concentrations in Amador County groundwater within the Buena Vista Coal Basin as high as 15.6 mg/L.*

Therefore, the precise cause of the elevated manganese concentrations at the WWTP remains to be confirmed. Pending such confirmation, we cannot positively state that operations at the WWTP are or are not contributing to elevated groundwater manganese levels. And the absence of significant Manganese detections at the Scully Ranch well, located 535 downgradient from the WWTP certainly indicates that regional groundwater may not be impacted with Manganese. In fact, it is a strong possibility that, as reducing conditions dissipate proportional to distance from the WWTP, the "Ion Mobilization" phenomenon ceases to exist and the transport mechanism disappears, making the Manganese adhere once again to soil particles, thus limiting any potential plume of Manganese in the groundwater..

Regarding Sodium, Chloride, and Boron levels, Groundwater Limitation D.1 states, "The discharge shall not cause underlying ground water to: (1.) Be degraded." While we are recognizing, as described in the 3rd Quarter 2003 Groundwater Monitoring Report, City of Ione Wastewater Treatment Plant, and subsequent reports, that Sodium, Chloride, and Boron are present in groundwater at levels consistent with WWTP effluent, the levels encountered are well within the most stringent applicable water quality standards, and, in the absence of downgradient sources of like character, attenuation of the levels would be expected.

Consequently, based on current data, we would submit that, regarding these parameters, the City of Ione is in compliance with Groundwater Limitation D.1 as it is likely that the concentrations present would not unreasonably affect present and probable future beneficial uses of the groundwater.

2. Order R5-2003-0108 (2) states, "The Discharger shall comply with all other aspects of WDRs No. 95-125, including the revised monitoring and reporting program, immediately."

The Ione WWTP is in compliance with this provision.

3. Order R5-2003-0108 (3) states, "The Discharger shall not discharge wastewater into any treatment or percolation/evaporation pond, other than the seven ponds currently at the facility, until the Regional Board has adopted revised WDRs allowing such discharge."

The Ione WWTP is in compliance with this provision.

4. Order R5-2003-0108 (4) states, "Beginning with the month of July 2003 and continuing until September 2004, the Discharger shall take monthly measurements of (a) the groundwater elevation in each monitoring well and (b) the surface water elevation of Sutter Creek adjacent to MW-2. The monitoring results shall be included in the quarterly groundwater reports required by revised MRP No. 95-125, and shall include an interpretation by a California Registered Geologist as to whether groundwater is flowing into Sutter Creek in the vicinity of the wastewater treatment plant."

The Ione WWTP completed the program of monthly monitoring in compliance with this provision. We have reinstituted monthly groundwater elevation tracking.

5. Order R5-2003-0108 (5) states, "The third quarter 2003 groundwater monitoring report, due by 1 November 2003, shall contain a summary of groundwater monitoring. The report shall contain summary tables of all analytical and gradient data collected to date, compare groundwater constituent concentrations against background groundwater concentrations, and compare groundwater constituent concentrations against applicable water quality objectives. The report shall describe whether the discharge from the Ione wastewater treatment plant has degraded groundwater above background conditions and/or degraded groundwater above applicable water quality objectives."

The Ione WWTP submitted the specified document on 14 November 2003.

6. Order R5-2003-0108, provision (6) states: "By 1 January 2004, the Discharger shall submit a Facility Guidance Document designed to address certain water quality policies, and their application to the discharge from the City of Ione's wastewater treatment plant..."

The Facility Guidance Document was presented to the Ione City Council for endorsement at the 17 February 2004 Council Meeting and then formally submitted.

7. Order R5-2003-0108, provision (7) states: "By **30 November 2004**, the Discharger shall submit a Final Wastewater Master Plan..."

The City of Ione Wastewater Treatment Plant Master Plan was submitted 30 November 2004.

8. Order R5-2003-0108, provision (8) states: "**Within 60 days of staff's written approval** of the Final Wastewater Master Plan, the Discharger shall submit a Report of Waste Discharge to allow WDRs to be revised to require the implementation of the items in the Master Plan."

The City of Ione submitted the RWD on 1 November 2005 and a revised RWD on 9 June 2006.

9. Order R5-2003-0108 (9) states, "**Beginning with the third quarter of 2003**, the Discharger shall submit a Quarterly Compliance Status Report. The report shall describe all work completed during the calendar quarter to comply with this Cease and Desist Order; all operation and maintenance work completed on the wastewater treatment facility; and any new, modified, or renovated component of the treatment and disposal system. *Quarterly Compliance Status Reports* shall be submitted by the **15th day of the month following the quarter for which the report is prepared** (e.g., the third quarterly report is due by 15 October each year)."

This document, submitted 27 April 2007, constitutes the seventeenth Quarterly Compliance Status Report submitted under this provision.

- ***Describe all...operation and maintenance work completed on the wastewater treatment facility***

Routine operation and maintenance continues on a daily basis. Quarterly cleaning of collection system trouble spots was performed during May.

- ***Describe... any new, modified, or renovated component of the treatment and disposal system***

A replacement raw sewage pump was installed during June. Construction of the force main from the lift station at the Castle Oaks Water Reclamation Plant to the WWTP headworks was started this reporting period. This project will complete the infrastructure for the Castle Oaks development in accordance with the Ione Country Club Estates EIR (SCH # 89030607).

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I certify under penalty of law that I have personally examined and am familiar with the information submitted herein and based on my inquiry of those individuals responsible for obtaining the information, I believe the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Respectfully,

A handwritten signature in cursive script, reading "Julio S. Guerra".

Julio S. Guerra
Chief Operator

Cc: City Manager
Lee & Ro